

ABSTRACT OF THE DISCLOSURE

The present invention provides a semiconductor device and a method of manufacturing the same improved in reliability of a gate insulating film by increasing
5 a total charge amount Q_{bd} by suppressing a film stress of a gate electrode formed of a polysilicon film, to a low value. Since the film stress is closely related to a film formation temperature, it is possible to reduce the film stress lower than the conventional case by
10 forming a film at as a high temperature as 640°C or more. At this time, when the film stress decreases, the total charge amount Q_{bd} regulating dielectric breakdown of the film increases, improving reliability of the gate insulating film. It is therefore possible to set the
15 film stress of the gate electrode at 200 MPA or less in terms of absolute value by forming the gate electrode at 640°C or more.